Location Based Systems/Services
'Location data – finding the needle in the haystack'
20th January 2016

Hosted by MEDIATEK

This SIG is championed by David Bartlett, **Omnisense,** Bob Cockshott**, The KTN,**
Nicolas Graube, **Qualcomm Technologies Int** and Andrew Matthews

Venue: MediaTek, Building 2030, Cambourne Business Park, Cambourne Road, Cambridge, CB23 6DW

AGENDA

13:30	Registration and networking
14:00	Introduction to Location Based Systems/Services from **David Bartlett, Omnisense**
14:10	Welcome from host, **Henry Vickers**, UK Software Director, **MediaTek**
14:20	**Maggie Brown,** Innovation Programme Coordinator, **Crossrail** Narrative to follow
14:40	Q&A
14:45	**Don't fear the third dimension** **David Mercel,** CTO, **Advanced Laser Imaging** Despite the proliferation of recorded 3D positional information it is still under-utilised across most industry sectors and still seen as a specialist pursuit. What causes this fear of adoption? Should we still be afraid of gathering and using this data? Or is it time to shake off the fear and perceived limits and embrace the third dimension? This talk will challenge our perceptions of current limits on using 3D information and describe how it can, and is, being harnessed to change the world.
15:05	Q&A
15:10	**Refreshments and networking**
15:40	**Session chaired by Stirling Essex, Espansivo, Wireless Heritage SIG Champion** **Enhancing our real-world interactions through location-based services** **Steve Marsh,** CEO & Founder, **GeoSpock** Location-based insights have the potential to revolutionise the way in which we interact with the world around us. By understanding real-world behaviour we can optimise our transport networks; build smarter cities; and add immense value to a huge array of user experiences - but handling the vast quantity of location information required for such use cases is a massive problem.
16:00	Q&A
16:05	**The how and why of finding people on construction sites** **Simon Bee,** Senior Software Development Manager, **Autodesk** Construction projects present a rich, varied and often challenging environment in which to track people and assets. This talk will describe some of the specific problems faced by those attempting to integrate location based tracking technologies into their construction projects. We'll also explore how the activities we might aim to support can radically change the technological requirements.
16:25	Q&A
16:30	Panel session with all speakers chaired by **SIG Champion, David Bartlett, Omnisense**
17:00	**Event closes**

With the permission of the speakers, presentations will be loaded to the CW website on the day following the event

Organiser

CW (Cambridge Wireless Ltd)

CW is the leading international community for companies involved in the research, development and application of wireless and mobile, internet, semiconductor and software technologies. With 400 members from major network operators and device manufacturers to innovative start-ups and universities, CW stimulates debate and collaboration, harnesses and shares knowledge, and helps to build connections between academia and industry. CW's 19 Special Interest Groups (SIGs) provide its members with a dynamic forum where they can network with their peers, track the latest technology trends and business developments and position their organisations in key market sectors. CW also organises the annual Future of Wireless International Conference and Discovering Start-Ups competition along with other high-quality industry networking events and dinners. With headquarters at the heart of Cambridge, UK, CW partners with other international industry clusters and organisations to extend its reach and remain at the forefront of global developments and business opportunities. For further information visit **www.cambridgewireless.co.uk**

Host

MediaTek

MediaTek is a pioneering fabless semiconductor company, and a market leader in cutting-edge Systems on Chip for wireless communications and connectivity, HDTV, DVD and Blu-ray. MediaTek created the world's first True Octa-core™ smartphone platform with LTE and our CorePilot™ technology releasing the full power of multi-core mobile processors. Through MediaTek Labs™, the company is creating a worldwide ecosystem in support of device creation, application development and services based around MediaTek offerings. With an emphasis on enabling technology for the masses and not the chosen, everyone can be an Everyday Genius®. MediaTek [TSE:2454] is headquartered in Taiwan and has offices worldwide. For further information visit **www.mediatek.com**

SIG Champions

David Bartlett, Omnisense

David Bartlett has specialist knowledge in the fields of location technology, wireless communications and digital imaging. Omnisense supplies real-time location and tracking systems (RTLS), technology and services based on its patented sparse-wideband (SWB) technology. The technology is extremely reliable and the entire system can be deployed without need for wired infrastructure (wireless). As such the system can be deployed rapidly and is fully transportable to different sites. For further information visit **www.omnisense.co.uk**

Bob Cockshott, The KTN

After graduating in Astronomy Bob worked for 25 years in the space industry as a systems engineer and project manager developing electro-optical and RF payloads.

Bob joined the Location and Timing KTN in 2006, becoming KTN Director in 2008. Bob continues to cover all position, navigation and timing technologies and applications, and now looks also looks after quantum technology commercialisation following the launch of the £270m UK National Quantum Technology Programme. For further information visit **www.ktn-uk.co.uk**

Nicolas Graube, Qualcomm Technologies Int

Nicolas Graube is leading the advanced location algorithms group at Qualcomm. Directly reporting to the Chief Innovation Officer, this group is tasked to cover all aspects of in-doors location technologies, present and future, within the organization. Expertise in the domain of location has been gained over a period of more than twenty years, starting at Cambridge EuroPARC in the early 90's, using Olivetti's Active Badges, then more recently providing Location Solutions in the Cellular domains (GSM,UMTS), and presently addressing in-doors challenges using both WiFi and Ble. Particular interest of the group is in the domain of usage of location with constrained infra-structure, in public and enterprise spaces, using stock hardware. For further information visit: **www.qualcomm.co.uk**

Andrew Matthews

Andrew Matthews was director of product marketing and previously director of technology management at Nokia Technologies in the UK. Based in Nokia's Cambridge research center, Andrew was responsible for strategic planning and marketing for multiple laboratories focusing on sensor technologies, location based services and privacy.

Prior to joining Nokia, Andrew held a variety of senior management roles in companies ranging from startups to multi-national corporations. Focusing primarily on sales and business development, Andrew also directed new product development for global corporations and set up collaborations with product development and distribution partners, notably in the Far East.

Graduating in engineering, Andrew went on to complete a PhD in ion implantation, receiving a Royal Society Fellowship to continue his research in RIKEN, Japan.

Speakers

Simon Bee, Autodesk

Simon is a Senior Software Development Manager at Autodesk, where he leads engineering teams in the UK and US. Autodesk is a leader in 3D design, engineering and entertainment software. It has a portfolio of over 50 products, including AutoCAD and Revit. Simon has a degree in computer science and a PhD in Virtual Reality. For further information visit **www.autodesk.co.uk**

Maggie Brown, Crossrail

Profile to follow. For further information visit **www.crossrail.co.uk**

Steve Marsh, GeoSpock

Dr. Steve Marsh is the Founder & CEO of GeoSpock Ltd who are the leader in databases for handling extreme-scale data in real-time. He recently completed his PhD in Computer Science at the University of Cambridge, where he was part of a small team focused on building and programming a custom super-computer designed to carry out real-time simulation of extreme-scale neural networks. For further information visit **www.geospock.com**

David Mercel, Advanced Laser Imaging

A graduate of University College London in Planetary Science where his studies included modules in remote sensing and advanced imaging technologies. Dave spent 4 years working for one of the UK's leading survey companies working in the security, architectural, heritage, rail and film industries, where he quickly built a reputation for innovation and development of bespoke solutions to some of the most challenging projects. He was instrumental in providing services to the Metropolitan Police Service (MPS), especially in the aftermath of the 7/7 London bombings.

He joined the Metropolitan Police Service in late 2005 and went on to become the first Head of Laser Scanning. He pioneered the use of the technology for preplanned, contingency, real-time, post incident operations and dynamic court presentations and led the survey teams on numerous high profile and highly sensitive projects.

He is a highly respected figure in the international forensic laser scanning community and has presented at a number of internationally attended events and worked closely with government agencies, receiving commendations for his work.

Now at Advanced Laser Imaging Ltd he continues to pioneer the adoption of Laser Scanning and Photogrammetric technologies within the Policing and Security Sectors and beyond. For further information visit **www.advancedlaserimaging.com**